

REMARKS

By this response, claims 1-31 are pending as a continuing application under a Request for Continued Examination (RCE). Compared to prior versions, claims 1 and 12 are amended.

Independent claims 1 and 12 of the application are amended to more expressly recite that the linear actuator of the present disclosure includes a stop displaceable with respect to a housing, wherein the stop slides in a first direction (under a pulling force applied by a heated shape memory alloy wire) into an interior of the housing. Express support for this amendment is found in the present disclosure, see at least page 3, ll 19-24 (“... causing the stop to slide in a first direction into the housing interior channel.”) and also at least Figures 2a and 2b. It is noted also that claim 21 as originally filed included this limitation (claim 21, ll 4-7: “... at least one wire formed of a shape-memory alloy attached at a first end to the stop and at a second end to the housing for applying a pulling force to the stop when heated to a predetermined temperature to cause the stop to slide in a first direction into the housing interior channel...”). Accordingly, no new matter is added.

Further with respect to the amendment of claims 1 and 12, the Office purportedly follows a policy of “compact prosecution,” with the stated goal of requiring that “... both examiners and applicants provide the information necessary to raise and resolve the issues related to patentability expeditiously,”¹ to prevent “piecemeal prosecution.”² Still yet further, the amendment to claims 1 and 12 simply incorporates subject matter found in claim 21 as originally filed. Therefore, the limitation has been of record in the application since the filing date of the application, and has presumably been thoroughly searched by the Examiner prior even to the mailing date of the first Office Action (November 26, 2007). Thus, it is believed that, after reviewing the arguments set forth below, the Examiner will agree that the

¹ Official Gazette, United States Patent and Trademark Office, November 7, 2003.

² Manual of Patent Examining Procedure §707.07(g).

pending claims are in condition for allowance or Appeal. Further searching by the Examiner is unnecessary, unwarranted, and violative of the Office policy of compact prosecution. Even more, an additional search for a feature that has been clearly set forth in the application and in an independent claim since the filing of the present application in 2003 could only be construed to be a delay in prosecution stemming from the Examiner's reluctance to issue an allowance count, rather than being tied to any specific issue of prior art or amendment necessitating additional searching.

Turning now to the most recent Action, claims 1 and 9-11 were rejected under 35 U.S.C. §102(e) over the Szilagyi patent (U.S. Patent No. 7,117,673; the '673 patent). By telephone conference initiated by the undersigned on May 27, 2008, the Examiner stated that the Section 102(e) date applied to the Szilagyi patent was the earlier provisional filing date, that is, May 6, 2002, rather than the actual filing date of the Szilagyi patent (May 6, 2003). That is, the Examiner stated that it was his belief that the Szilagyi patent was entitled to the provisional filing date of May 6, 2002 as the Section 102(e) date.

If the Examiner chooses to apply the Szilagyi provisional filing date as the 102(e) date, then the Applicant is entitled to a specific determination that the Szilagyi provisional application (Serial No. 60/378,619), which has not been provided to the Applicant, indeed supports the Section 102 rejection with the requisite specificity. As is explained in *Ex parte Messerges*, if a 102(e) reference claims priority to an earlier filed provisional patent application, the filing date to which the reference is entitled for the subject matter on which the Examiner relies must be determined.³ Also, the remand required that the Examiner determine whether the provisional patent application provided support rising to the level of the written description requirement of 35 U.S.C. §112, 1st paragraph.⁴

³ *Order Remanding to the Examiner, Ex parte Messerges, Appeal 2007-1662, p. 3-4* (B.P.A.I. Nov. 20, 2007)(The Board remanded to the Examiner for a determination of whether Sweet, U.S. Publication No. 2002/0031230 A1, was entitled to its provisional filing date since the provisional application appeared void of any support of the subject matter relied on by the Examiner in fashioning the claim rejections.).

⁴ *Id.*

The Board has made crystal clear that the Examiner must provide evidence of the application filing date when assessing a Section 102(e) reference claiming priority to an earlier-filed provisional application. *Accordingly, the Applicant requests, as a matter of right and to satisfy the Applicant's entitlement to due process in proceedings before the Office, that the Examiner provide evidence supporting a filing date earlier than May 6, 2003 for Szilagyi, and also requests substantiation (to the extent evidence exists or the Examiner chooses to offer evidence) sufficient to meet the strictures of the written description requirement set forth in 35. U.S.C. §112, 1st paragraph.* As is made clear in *Ex parte Messerges*, “[o]nly after such a determination will the Examiner be in a position to reject the claims” based on the filing date of the Szilagyi provisional application.⁵ If such support cannot be provided, withdrawal of the Section 102(e) rejection of the claims over Szilagyi is believed to be merited and is respectfully requested.

If, in the alternative, the Examiner decides that the filing date of May 6, 2003 is the earliest filing date to which Szilagyi is entitled as a Section 102/103 reference, the Applicant points out that the present application claims priority to Provisional Patent Application Serial No. 60/409,460, filed on September 10, 2002. Thus, the invention of the present disclosure was constructively reduced to practice no later than that provisional filing date. To properly support a rejection under Section 102(e), the invention in question must have been described in a published patent application or granted patent filed by another *before the invention by the applicant for patent*.⁶ Since the present invention was constructively reduced to practice nearly 8 months before the May 6, 2003 Szilagyi filing date, the Szilagyi description was not filed before the invention date of the present applicant for patent. Therefore, as of its filing date of May 6, 2003, Szilagyi cannot properly be used as a Section 102 reference against the

⁵ *Id*

⁶ 35 U.S.C. §102(e) [“A person shall be entitled to a patent unless - ... the invention was described in - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent...”].

present disclosure. Again, withdrawal of the Section 102(e) rejection over Szilagyi is believed to be merited.

Next, the Examiner rejects claims 1-5 and 10 under Section 102(e) over U.S. Patent No. 6,374,608 to Corris et al. The Examiner recites a list of features set forth by Corris as allegedly meeting the claim limitation of “a stop displaceable on a linear axis with respect to the housing.” The Examiner cites the Corris wire catches 40a-40c (*Col. 5, ll 9-12*) as being “stops.” The Examiner cites also a feature 40m (see page 3 of the Action) which does not appear to be set forth in Corris, and therefore the Applicant cannot properly respond as to that feature. While not recited with any specificity, the “stops ... 42” recited by the Examiner (page 3 of the latest Action) are presumed to mean the Corris wire catches 42a-42c (*Col. 5, ll 9-12*).

The Examiner has mis-characterized the features of the Corris invention in his zeal to reject claims. Corris clearly sets out the features pointed to by the Examiner as “wire catches” 40a-40c and 42a-42c. The specific function given to those features is to provide an attachment point for a shape memory alloy wire 16 (see Figure 2 of Corris, reproduced below for convenience). As clearly shown in that Figure and in the accompanying description, the Corris invention comprises a first body member 12, a second body member 14, and a strand of shape memory alloy wire 16 (*Col. 3, ll 47-50*). First and second body members 12, 14 are slidably engageable with one another (*Col. 3, ll 50-54*). An internal spring 52 biases first and second body members 12, 14 apart from one another, whereas the SMA wire 16, fastened respectively to wire catches 40a-40c and 42a-42c and therefore held exterior of first and second body members 12, 14, when heated biases first and second body members 12, 14 towards one another (*Col. 3, ll 62-65*; see also Figures 3A, 3B, 4A, 4B).

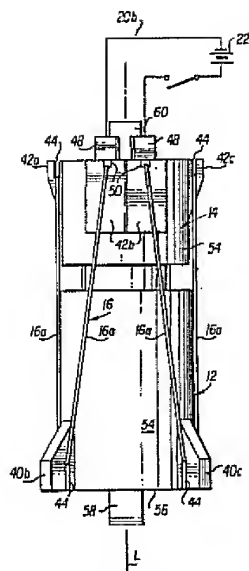


FIG. 3A

The Examiner will appreciate that in the context of the present disclosure, the noun “stop” means an object or a part of a mechanism which prevents movement (Oxford English Dictionary), or a machine part that stops or regulates movement (Webster’s II New Riverside University Dictionary, 1984, Houghton Mifflin Co.). If the wire catches of Corris are “stops,” what do they stop? That is, what movement or mechanism is stopped or regulated specifically by the Corris wire catches? Therefore, even the most cursory review of the drawings and description set forth by Corris, in view of the plain meaning of the term “stop,” makes clear that the limitation of a “stop” as set forth in the present independent claims is not and cannot be met by the features relied on by the Examiner.

Even more, the independent claims of the present application recite a “stop displaceable on a linear axis with respect to the housing.” The Examiner puts forth body members 12, 14, which as is set forth above are slidable relative to each other, to meet the presently claimed limitation of a housing. However, the Corris wire catches 40a-40c and

42a-42c are attached to first and second body members 12, 14 (“... the first body member 12 includes a plurality of first wire catches 40a, 40b, 40c and the second body member 14 includes a plurality of second wire catches 42a, 42b, 42c;” see *Col. 5, ll 9-12*). For the Corris invention it is the housing that is displaceable, not specifically the wire catches/stops attached thereto. Thus, by the plain language of Corris, even if the wire catches 40a-40c and 42a-42c are “stops” (as the Examiner would have it), they are not and cannot be “stops displaceable on a linear axis *with respect to the housing*.” For the Corris “stops” to be displaced, the Corris housing must be displaced. The teaching of Corris fails to meet this limitation of the present claims, and therefore the alleged Section 102 art does not teach each and every limitation of the present independent claims with the requisite specificity in accordance with the “all-elements” test set forth in *Verdegaal* and *Richardson*.⁷ Accordingly, the independent claims of the present application define over the teachings of the cited art. The claims depending from amended claims 1, 12, and 21 incorporate all of the limitations thereof by reference, and are therefore also believed to patentably define over any teaching of the cited art.

Still yet further, accepting the strained interpretation of Corris set forth by the Examiner in making the Section 102(e) rejection (which as set forth above the Applicant does not), it is noted that independent claim 1 is amended to more clearly recite that the claimed stop slides in a first direction into a housing interior channel. That is, the stop is external of the housing in the “stopped” or “stopping” orientation, and is displaced (on a linear axis with respect to the housing) to an open or releasing orientation wherein the stop is positioned in an interior of the housing. Independent claim 21 as originally filed also included this limitation. As discussed above, the wire catches of Corris, which the Examiner wishes to characterize as stops, are attached to the exterior of the “housing” (body members

⁷ *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (“The identical invention must be shown in as complete a detail as is contained in the ... claim”).

12, 14, see at least Figure 2 of Corris above). Thus, even accepting the strained interpretation that the Corris wire catches somehow function as “stops,” they are not and cannot be displaced to an interior channel of the Corris housing. The Section 102 rejection is overcome, and should be withdrawn.

Finally, the Examiner rejects claims 6-9 and 11-31 under 35 U.S.C. §103(a) over Corris in view of U.S. 6,762,515 to Gummin. First, as convincingly set forth above, it is believed that the independent claims of the present application (1, 12, 21) patentably distinguish over the teachings of the latest art cited by the Examiner. Of course, it is a settled principle of patent law that claims depending from allowable independent claims are similarly in condition for allowance without consideration of obviousness.⁸ Thus, at the least, the claims depending from claim 1 are in condition for allowance without consideration of obviousness.

Even more, for the reasons set forth above, Corris, the principal reference relied on, does not teach each feature of the present invention as set forth in the independent claims. At the least, none of the Corris features relied on by the Examiner (40a-40c, 42a-42c) can fairly said to be a stop displaceable on a linear axis with respect to a housing, wherein a shape memory wire when heated slides the stop into an interior channel of the housing. The teaching of Gummin of multiple SMA actuators in series or in parallel does not cure this deficiency.

When determining whether a claim is obvious, an examiner must make “a searching comparison of the claimed invention - *including all its limitations* - with the teaching of the


⁸ *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) (“Dependent claims are non-obvious under 35 USC 103 if the claims from which they depend are non-obvious.”).

prior art.”⁹ Thus, “obviousness requires a suggestion of all limitations in a claim.”¹⁰ The failure of an asserted combination to teach or suggest each and every feature of a claim remains fatal to a rejection under Section 103, despite any recent revision to the Manual of Patent Examining Procedure. Therefore, as set forth in the foregoing discussion, amended claims 1 and 12, and claim 21, are believed to be in allowable condition over any reasonable interpretation of the combination of Corris and Gummin. The claims depending therefrom are also in condition for allowance without consideration of obviousness.¹¹ The Section 103 rejection should be withdrawn.

For the foregoing reasons, the pending claims of the present application are believed to be in condition for allowance. Therefore, the prompt issuance of a Notice of Allowance is respectfully requested. *To the extent any fees are due beyond those authorized in the attendant RCE fee transmittal forms, although none are believed due, the undersigned authorizes their deduction from Deposit Account No. 11-0978.* If any other issues remain, the Examiner is invited to call the undersigned representative to expedite prosecution of this application.

Respectfully submitted,

KING & SCHICKLI, PLLC



Patrick M. Torre
Reg. No. 55,684

247 North Broadway
Lexington, Kentucky 40507
(859) 252-0889

⁹ *Ex parte Wada and Murphy*, Appeal 2007-3733 (B.P.A.I. Jan. 14, 2008), citing *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995); see also Manual of Patent Examining Procedure §2143.03, requiring the consideration of every claim feature in an obviousness determination.

¹⁰ *Ex parte Wada and Murphy*, Appeal 2007-3733 (B.P.A.I. Jan. 14, 2008), citing *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974).

¹¹ *In re Fine*.